

P23916.A01



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Kazutoshi YASUNAGA et al.

Group Art Unit:

Serial No : 10/614,834

Examiner:

Filed : July 9, 2003

For : SPEECH CODER AND SPEECH DECODER

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir :

In accordance with the duty of disclosure under 37 C.F.R. 1.56, 1.97-1.98, Applicants hereby call the following documents, which were cited during the prosecution of parent Application 10/133,735, and/or grandparent Application 09/319,933, since issued as U.S. Patent No. 6,415,254, to the Examiner's attention:

In an Office Action issued in the parent application on April 9, 2003, the Examiner cited the above-noted grandparent U.S. Patent No. 6,415,254 to YASUNAGA et al., issued July 2, 2002.

In an Office Action issued in the parent application on July 17, 2002, the Examiner cited the following documents:

U.S. Patent No. 4,868,867 to DAVIDSON et al., issued September 1989;

U.S. Patent No. 5,307,441 to TZENG, issued April 1994;

U.S. Patent No. 5,963,896 to OZAWA, issued October 1999;

U.S. Patent No. 5,826,226 to OZAWA, issued October 1998.

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U.S. Patent No. 5,195,137 to SWAMINATHAN, issued March 1993; and

U.S. Patent No. 6,122,608 to McCREE, issued September 2000.

In an Information Disclosure Statement in the parent application submitted August 5, 2002, Applicants submitted a copy of a European Search Report from the European Patent Office dated July 9, 2002, with respect to counterpart Patent Application No. 98950336.2, in which the European Patent Examiner cited the following documents:

U.S. Patent No. 5,699,477 to MCCREE, issued December 16, 1997;

“A Complexity Reduction Method for VSELP Coding Using Overlapped Sparse Basis Vectors”, by SUNG JOO KIM et al., Proceedings of the International Conference on Signal Processing Applications and Technology, XX, XX, Vol. 2, pages 1578-1582, published October 18, 1994;

EP 0 684 702 to TOKYO SHIBAURA ELECTRIC CO, published November 29, 1995;

“On Reducing Computational Complexity of Codebook Search in CELP Coder Through the Use of Algebraic Codes”, by LAFLAMME et al., IEEE 1990, page 178, column 2, lines 1-3; and

“State of the Art and Trends in Speech Coding” by R. J. SLUIJTER et al., Philips Journal of Research, Volume 49, no. 4, pages 455-488, Elsevier, Amsterdam NL, 1995.

The category of relevance, the particular portions(s) of the references that are considered to be relevant, and the claims of the corresponding European application to which the references are considered to be relevant, are as set forth in the European Search Report.

In an Information Disclosure Statement filed in the grandparent application on September 17, 1999, the following documents were called to the Examiner’s attention:

SCHROEDER, M.R., et al., “Code Excited Linear Prediction (CELP): High Quality Speech

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At Very Low Bit Rates”, Proc. ICASSP 1985, pages 937-940;

SALAMI, R., et al., “8 K Bit/s ACELP Coding Of Speech With 10 MS Speech Frame: A Candidate For CCITT Standardization”, ICASSP 1994, pages II-97~II100, 1994;

LINDE, Y., et al., “An Algorithm For Vector Quantizer Design”, IEEE Transactions On Communications, Vol. Com-28, No.1, pages 84-95, January 1980;

GERSO, I., et al., “Vector Sum Excited Linear Prediction (VSELP) Speech Coding At 8 KBPS”, pages 461-464, IEEE 1990;

IKEDO, J., et al., “Low Complexity CELP Speech Coder Using Orthogonalized Search Of Algebraic Code”, page 255, together with a partial English translation thereof;

European Patent Publication No. EP 0 778 561 A2, to NOMURA, published on June 11, 1997; and

U.S. Patent No. 5,734,790, to TAGUCHI, issued on March 31, 1998.

U.S. Patent Application No. 09/101,186, filed on July 6, 1998 (the issue fee has been paid a patent resulting from this application; however, not patent has yet issued); and

U.S. Patent Application No. 09/267,685, filed on March 15, 1999, and since issued as U.S. Patent No. 6,266,632 on July 24, 2001.

The following unexamined Japanese Patent Publications were also called to the Examiner’s attention by the Information Disclosure Statement filed on September 17, 1999 in the grandparent application:

Japanese Patent Publication No. JP2-280200, filed on November 16, 1990, together with an English language abstract;

Japanese Patent Publication No. JP2-282800, filed on November 20, 1990, together with an

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English language abstract;

Japanese Patent Publication No. JP9-160596, filed June 20, 1997, together with an English language abstract;

Japanese Patent Publication No. JP-8-008753, filed on January 12, 1996, together with an English language abstract;

Japanese Patent Publication No. JP-10-063300, filed on March 6, 1998, together with an English language abstract;

Japanese Patent Publication No. JP-7-028497, filed on January 31, 1995, together with an English language abstract;

Japanese Patent Publication No. JP-5-108098, filed on April 30, 1993, together with an English language abstract;

Japanese Patent Publication No. JP-6-202699, filed on July 22, 1994, together with an English language abstract; and

Japanese Patent Publication No. JP-9-034498, filed on February 7, 1997, together with an English language abstract.

In an Office Action issued in the same grandparent application on January 28, 2002, the Examiner cited the following documents:

U.S. Patent No. 5,195,137 to SWAMINATHAN, issued March 1993; and

U.S. Patent No. 6,122,608 to McCREE, issued September 2000.

In an Office Action issued in the same grandparent application on July 5, 2001, the Examiner cited the following documents:

U.S. Patent No. 4,868,867 to DAVIDSON et al., issued September 1989;

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U.S. Patent No. 5,307,441 to TZENG, issued April 1994;

U.S. Patent No. 5,963,896 to OZAWA, issued October 1999; and

U.S. Patent No. 5,826,226 to OZAWA, issued October 1998.

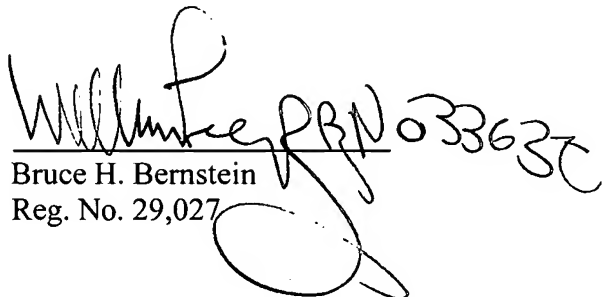
Applicants note that the above-mentioned documents were either cited by the Examiner or were submitted with an Information Disclosure Statement in grandparent application No. 09/319,933 and/or in parent application No. 10/133,735, upon which the present application relies for an effective filing date under 35 U.S.C. §1.20. Since copies of each of the above-mentioned documents were previously submitted, Applicants have not attached them hereto in accordance with 37 C.F.R. §1.98(d).

Applicants respectfully request that the Examiner consider the above materials and cite the patent documents and publications. The above-noted documents have been listed on a PTO-1449 Form which is attached hereto. Accordingly, the Examiner is requested to initial the appropriate spaces on the attached PTO-1449 Form and to return a copy of the form to the Applicants with the next official communication in the present application to confirm consideration of these documents.

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed number.

Respectfully submitted,
Kazutoshi YASUNAGA

October 9, 2003
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191


Bruce H. Bernstein
Reg. No. 29,027



Form PTO-1449

U.S. Department of Commerce
Patent and Trademark OfficeAtty. Docket No.
P23916Serial No.
10/614,834

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**
(Use several sheets if necessary)

Applicants
Kazutoshi YASUNAGA et al.Filing Date
July 9, 2003Group
Unknown**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4 8 6 8 8 6 7	09/1989	DAVIDSON et al.			
	5 3 0 7 4 4 1	04/1994	TZENG			
	5 9 6 3 8 9 6	10/1999	OZAWA			
	5 8 2 6 2 2 6	10/1998	OZAWA			
	5 1 9 5 1 3 7	03/1993	SWAMINATHAN			
	6 1 2 2 6 0 8	09/2000	MCCREE			
	5 6 9 9 4 7 7	12/16/97	MCCREE			
	5 7 3 4 7 9 0	03/31/98	TAGUCHI			
	6 2 6 6 6 3 2	07/24/01				
	5 1 9 5 1 3 7	03/1993	SWAMINATHAN			
	6 1 2 2 6 0 8	09/2000	MCCREE			
	4 8 6 8 8 6 7	09/1989	DAVIDSON et al.			

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
6 8 4 7 0 2	11/29/95	E.P.O.			
7 7 8 5 6 1	06/11/97	E.P.O.			
2 2 8 0 2 0 0	11/16/90	JAPAN			
2 2 8 2 8 0 0	11/20/90	JAPAN			
9 1 6 0 5 9 6	06/20/97	JAPAN			

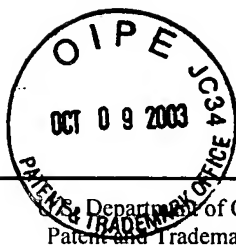
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1	Sung Joo KIM et al., "A Complexity Reduction Method for VSELP Coding Using Overlapped Sparse Basis Vectors" proceedings of the International Conference on Signal Processing Applications and Technology, XX,XX, Vol. 2, pages 1578-1582, published October 18, 1994.
2	M.R. SCHROEDER et al., "Code Excited Linear Prediction (CELP): High Quality Speech At Very Low Bit Rates", Proc. ICASSP 1985, pages 937-940.
3	R. SALAMI et al., "8 K Bit/s ACLEP Coding of Speech With 10 MS Speech Frame: A Candidate For CCITT Standardization", ICASSP 1994, pages II-97-II100, 1994.
4	English Language Abstract of JP Appln. No. 2-280200.

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DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form PTO-1449

Department of Commerce
Patent and Trademark OfficeAtty. Docket No.
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	5 3 0 7 4 4 1	04/1994	TZENG			
	5 9 6 3 8 9 6	10/1999	OZAWA			
	5 8 2 6 2 2 6	10/1998	OZAWA			

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DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
8 0 0 8 7 5 3	01/12/96	JAPAN			
7 0 2 8 4 9 7	01/31/95	JAPAN			
5 1 0 8 0 9 8	04/30/93	JAPAN			
6 2 0 2 6 9 9	07/22/94	JAPAN			
9 0 3 4 4 9 8	02/07/97	JAPAN			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

5	Y. LINDE, et al., "An Algorithm For Vector Quantizer Design", IEEE Transactions On Communications, Vol. Com-28, No. 1, pp. 84-95, January 1980.
6	I. GERSO, et al., "Vector Sum Excited Linear Prediction (VSELP) Speech Coding At 8 KBPS", pp. 461-464, IEEE 1990.
7	J. IKEDO, et al., "Low Complexity CELP Speech Coder Using Orthogonalized Search of Alebraic Code", pp. 225.(with a Partial English Translation).
8	English Language Abstract of JP Appln. No. 2-282800.
9	English Language Abstract of JP Appln. No. 9-160596.
1 0	English Language Abstract of JP Appln. No. 8-008753.
1 1	English Language Abstract of JP Appln. No. 5-108098.
1 2	English Language Abstract of JP Appln. No. 6-202699.
1 3	English Language Abstract of JP Appln. No. 9-034498.

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